FIG.1

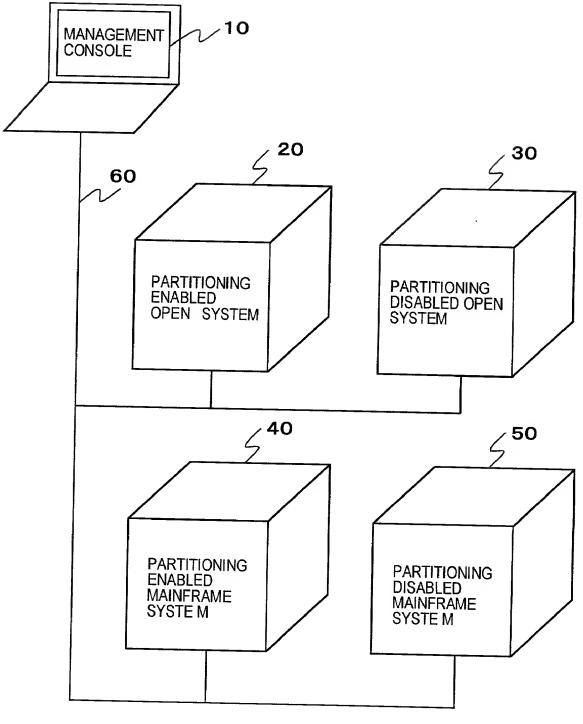

MANAGEMENT CONSOLE
10
20
30
60
PARTITIONING ENABLED OPEN SYSTEM
PARTITIONING DISABLED OPEN SYSTEM
40
50
PARTITIONING ENABLED MAINFRAME SYSTE M
PARTITIONING DISABLED MAINFRAME SYSTE M

FIG.2

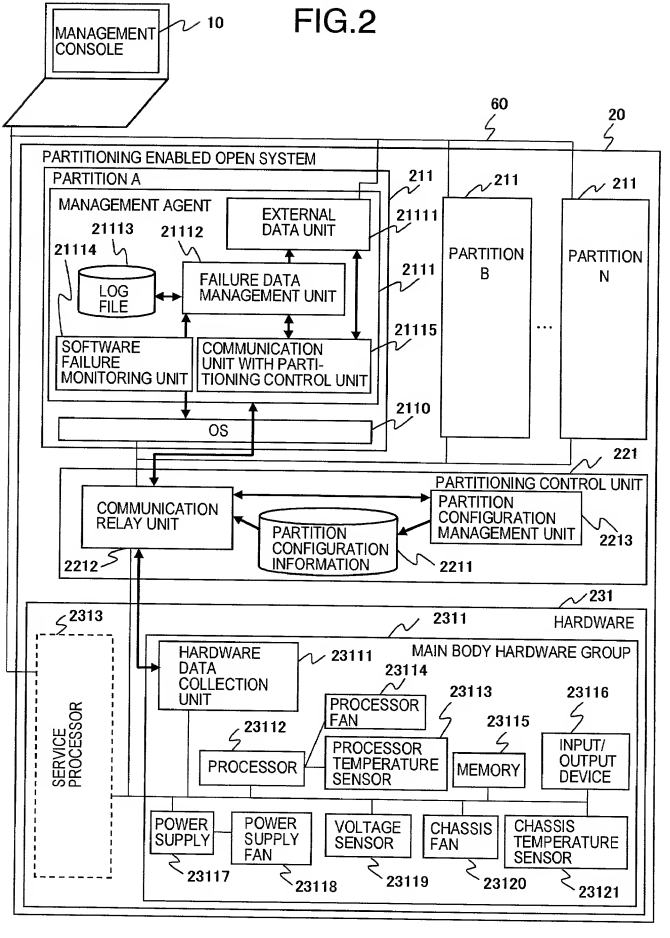

MANAGEMENT CONSOLE
10
60
20
PARTITIONING ENABLED OPEN SYSTEM
PARTITION A
211
211
211
MANAGEMENT AGENT
EXTERNAL DATA UNIT
21111
21113
21112
21114
LOG FILE
FAILURE DATA MANAGEMENT UNIT
2111
PARTITION B
PARTITION N
21115
SOFTWARE FAILURE MONITORING UNIT
COMMUNICATION UNIT WITH PARTITIONING CONTROL UNIT
2110
OS
221
PARTITIONING CONTROL UNIT
COMMUNICATION RELAY UNIT
PARTITION CONFIGURATION MANAGEMENT UNIT
2213
PARTITION CONFIGURATION INFORMATION
2211
2212
231
2313
2311
HARDWARE
HARDWARE DATA COLLECTION UNIT
23111
MAIN BODY HARDWARE GROUP
23114
23113
23116
PROCESSOR FAN
23115
23112
PROCESSOR
PROCESSOR TEMPERATURE SENSOR
MEMORY
INPUT/ OUTPUT DEVICE
SERVICE PROCESSOR
POWER SUPPLY
POWER SUPPLY FAN
VOLTAGE SENSOR
CHASSIS FAN
CHASSIS TEMPERATURE SENSOR
23117
23118
23119
23120
23121

FIG.3

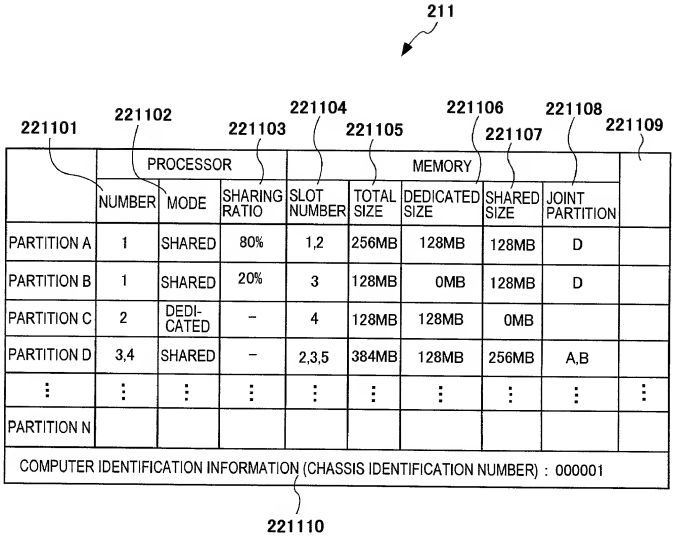

211
221101
221102
221103
221104
221105
221106
221107
221108
221109
PROCESSOR
MEMORY
NUMBER
MODE
SHARING RATIO
SLOT NUMBER
TOTAL SIZE
DEDICATED SIZE
SHARED SIZE
JOINT PARTITION
PARTITION A
1
SHARED
80%
1,2
256MB
128MB
128MB
D
PARTITION B
1
SHARED
20%
3
128MB
0MB
128MB
D
PARTITION C
2
DEDI-CATED
–
4
128MB
128MB
0MB
PARTITION D
3,4
SHARED
–
2,3,5
384MB
128MB
256MB
A,B
PARTITION N
COMPUTER IDENTIFICATION INFORMATION (CHASSIS IDENTIFICATION NUMBER) : 000001
221110

FIG.4

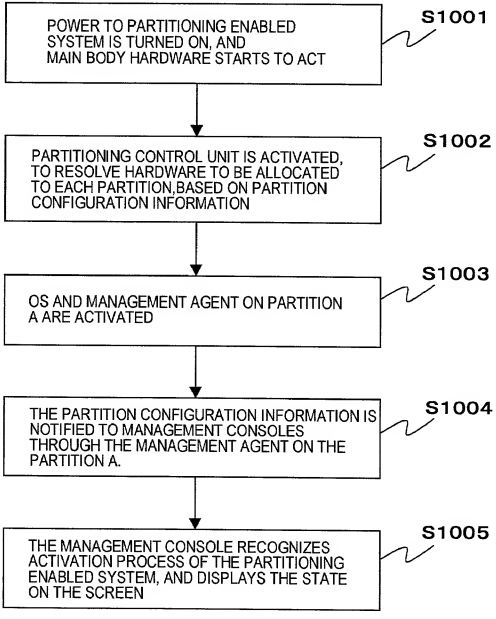

POWER TO PARTITIONING ENABLED SYSTEM IS TURNED ON, AND MAIN BODY HARDWARE STARTS TO ACT
S1001
PARTITIONING CONTROL UNIT IS ACTIVATED, TO RESOLVE HARDWARE TO BE ALLOCATED TO EACH PARTITION, BASED ON PARTITION CONFIGURATION INFORMATION
S1002
OS AND MANAGEMENT AGENT ON PARTITION A ARE ACTIVATED
S1003
THE PARTITION CONFIGURATION INFORMATION IS NOTIFIED TO MANAGEMENT CONSOLES THROUGH THE MANAGEMENT AGENT ON THE PARTITION A.
S1004
THE MANAGEMENT CONSOLE RECOGNIZES ACTIVATION PROCESS OF THE PARTITIONING ENABLED SYSTEM, AND DISPLAYS THE STATE ON THE SCREEN
S1005

FIG.5

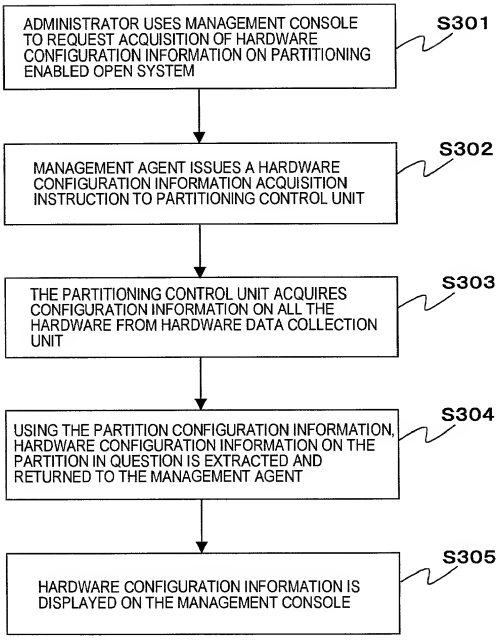

ADMINISTRATOR USES MANAGEMENT CONSOLE TO REQUEST ACQUISITION OF HARDWARE CONFIGURATION INFORMATION ON PARTITIONING ENABLED OPEN SYSTEM
S301
MANAGEMENT AGENT ISSUES A HARDWARE CONFIGURATION INFORMATION ACQUISITION INSTRUCTION TO PARTITIONING CONTROL UNIT
S302
THE PARTITIONING CONTROL UNIT ACQUIRES CONFIGURATION INFORMATION ON ALL THE HARDWARE FROM HARDWARE DATA COLLECTION UNIT
S303
USING THE PARTITION CONFIGURATION INFORMATION, HARDWARE CONFIGURATION INFORMATION ON THE PARTITION IN QUESTION IS EXTRACTED AND RETURNED TO THE MANAGEMENT AGENT
S304
HARDWARE CONFIGURATION INFORMATION IS DISPLAYED ON THE MANAGEMENT CONSOLE
S305

FIG.6

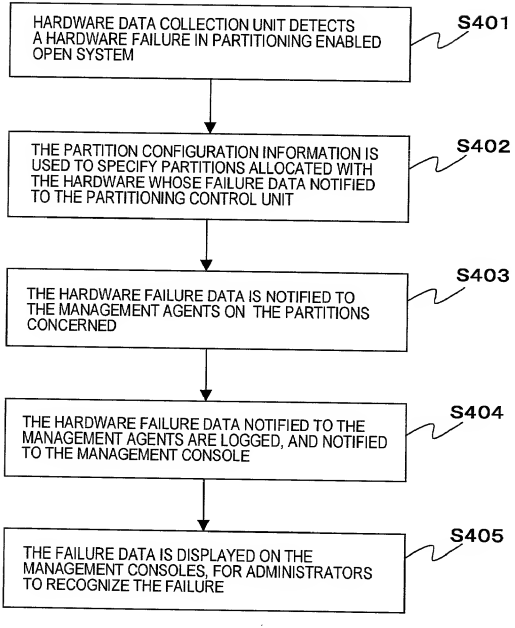

HARDWARE DATA COLLECTION UNIT DETECTS A HARDWARE FAILURE IN PARTITIONING ENABLED OPEN SYSTEM
S401
THE PARTITION CONFIGURATION INFORMATION IS USED TO SPECIFY PARTITIONS ALLOCATED WITH THE HARDWARE WHOSE FAILURE DATA NOTIFIED TO THE PARTITIONING CONTROL UNIT
S402
THE HARDWARE FAILURE DATA IS NOTIFIED TO THE MANAGEMENT AGENTS ON THE PARTITIONS CONCERNED
S403
THE HARDWARE FAILURE DATA NOTIFIED TO THE MANAGEMENT AGENTS ARE LOGGED, AND NOTIFIED TO THE MANAGEMENT CONSOLE
S404
THE FAILURE DATA IS DISPLAYED ON THE MANAGEMENT CONSOLES, FOR ADMINISTRATORS TO RECOGNIZE THE FAILURE
S405

FIG.7

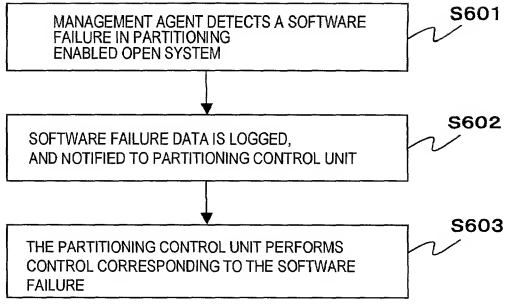

MANAGEMENT AGENT DETECTS A SOFTWARE FAILURE IN PARTITIONING ENABLED OPEN SYSTEM
S601
SOFTWARE FAILURE DATA IS LOGGED, AND NOTIFIED TO PARTITIONING CONTROL UNIT
S602
THE PARTITIONING CONTROL UNIT PERFORMS CONTROL CORRESPONDING TO THE SOFTWARE FAILURE
S603

FIG.8

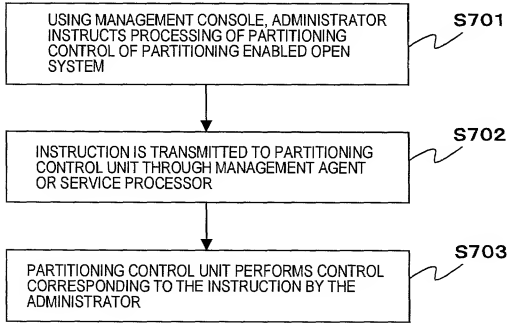
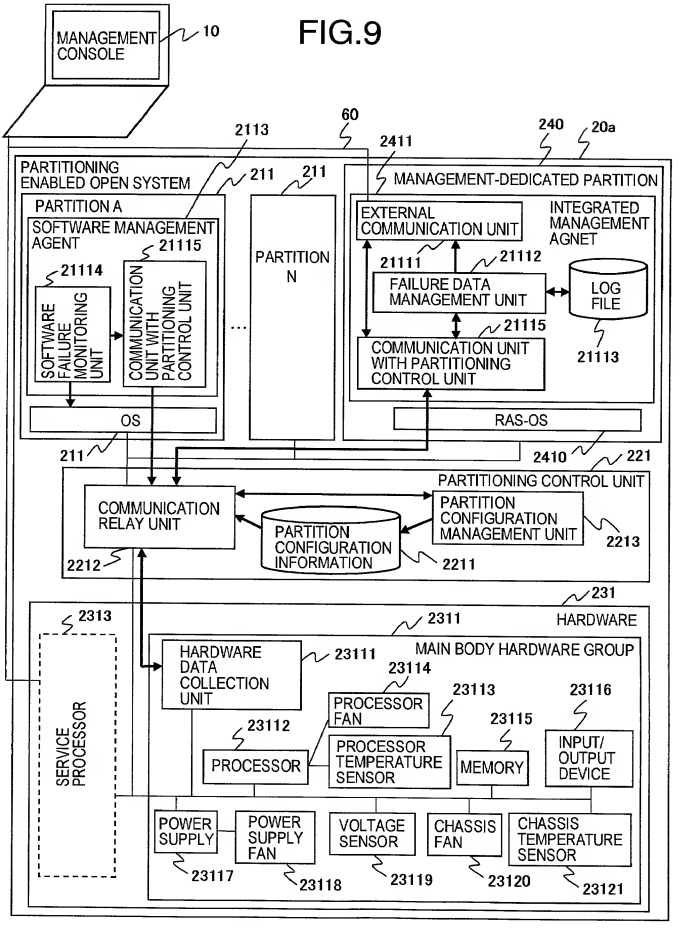

USING MANAGEMENT CONSOLE, ADMINISTRATOR INSTRUCTS PROCESSING OF PARTITIONING CONTROL OF PARTITIONING ENABLED OPEN SYSTEM
S701
INSTRUCTION IS TRANSMITTED TO PARTITIONING CONTROL UNIT THROUGH MANAGEMENT AGENT OR SERVICE PROCESSOR
S702
PARTITIONING CONTROL UNIT PERFORMS CONTROL CORRESPONDING TO THE INSTRUCTION BY THE ADMINISTRATOR
S703

FIG.9


MANAGEMENT CONSOLE
10
60
2113
2411
240
20a
PARTITIONING ENABLED OPEN SYSTEM
211
211
MANAGEMENT-DEDICATED PARTITION
PARTITION A
SOFTWARE MANAGEMENT AGENT
21115
21114
SOFTWARE FAILURE MONITORING UNIT
COMMUNICATION UNIT WITH PARTITIONING CONTROL UNIT
PARTITION N
EXTERNAL COMMUNICATION UNIT
INTEGRATED MANAGEMENT AGNET
21111
21112
FAILURE DATA MANAGEMENT UNIT
LOG FILE
21115
COMMUNICATION UNIT WITH PARTITIONING CONTROL UNIT
21113
OS
RAS-OS
211
2410
221
PARTITIONING CONTROL UNIT
COMMUNICATION RELAY UNIT
PARTITION CONFIGURATION INFORMATION
PARTITION CONFIGURATION MANAGEMENT UNIT
2213
2212
2211
231
2313
2311
HARDWARE
HARDWARE DATA COLLECTION UNIT
23111
MAIN BODY HARDWARE GROUP
23114
23113
23116
PROCESSOR FAN
23115
23112
PROCESSOR
PROCESSOR TEMPERATURE SENSOR
MEMORY
INPUT/ OUTPUT DEVICE
SERVICE PROCESSOR
POWER SUPPLY
POWER SUPPLY FAN
VOLTAGE SENSOR
CHASSIS FAN
CHASSIS TEMPERATURE SENSOR
23117
23118
23119
23120
23121